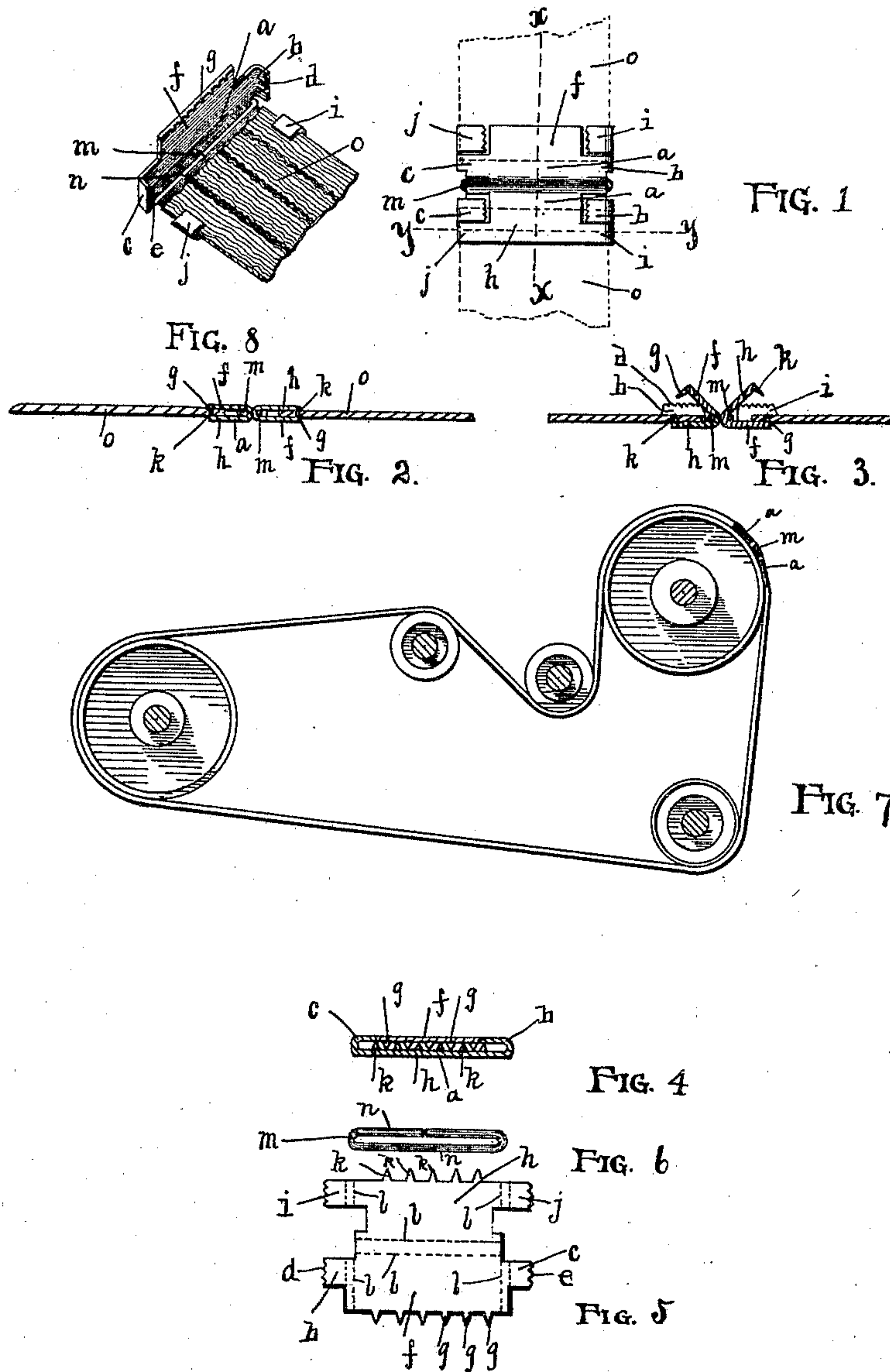


(No Model.)

W. N. BAILEY & C. F. TILTON.  
BELT FASTENER.

No. 473,864.

Patented Apr. 26, 1892.



ATTEST.

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# UNITED STATES PATENT OFFICE.

WILBER N. BAILEY AND CHARLES F. TILTON, OF BAY CITY, MICHIGAN,  
ASSIGNORS TO THE EUREKA TAPE AND BELT FASTENING COMPANY,  
OF SAME PLACE.

## BELT-FASTENER.

SPECIFICATION forming part of Letters Patent No. 473,864, dated April 26, 1892.

Application filed June 6, 1891. Serial No. 395,358. (No model.)

*To all whom it may concern:*

Be it known that we, WILBER N. BAILEY and CHARLES F. TILTON, citizens of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Tape-Fasteners for Printing-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in devices for fastening the ends of tapes for printing or folding machines; and the object of the invention is to provide a strong and reliable device for securing together the abutting ends of tapes for printing-presses, paper-folding machines, &c., which can be quickly and easily applied and durable in its operation.

Another object of the invention is to provide a pliable metal fastening for securing the abutting ends of printing or folding machine tapes together in such a manner as to firmly retain the abutting ends of the tapes in their proper position and at the same time allow the parts or sections of the fastening to bend sufficiently to conform to the peripheries of the carrying-rollers in both directions.

30 The invention consists in the combination, arrangement, and construction of the parts, as we shall hereinafter more fully describe, and which will also be specifically pointed out in the claims of this specification.

Our invention is illustrated in the accompanying drawings, in which the same letters of reference will be found indicating the same parts throughout the several views.

40 Figure 1 represents a plan view of our improved tape-securing device in position for connecting the ends of the tape. Fig. 2 is a section of the same, taken at *xx*. Fig. 3 is the same, showing the parts in position before the fastening is secured. Fig. 4 is a section of Fig. 1, taken at *yy*. Fig. 5 is a plan view of the blank for forming the fastener. Fig. 6 shows the link for the hinge detached. Fig. 7 is a side view of a tape in operation with our device attached thereto. Fig. 8 is a view in perspective of one end section partly open with the tape in position for fastening.

50 A sheet-metal blank is first cut to a form

as shown in Fig. 5 and is arranged as follows: *a* represents a base or body portion provided on its lateral edges with extensions *b* and *c*, provided with serrations *d* and *e*, while the middle portion *f* of the body is extended and provided on its outer edges with serrations *g*. From the opposite edge of the base *a* is extended a tongue portion *h*, having on the lateral edges of its outer portions the extensions *i* and *j*, the outer end edge of the tongue *h* being provided with serrations *k*.

The blank thus formed is arranged to bend upon itself transversely at the dotted line *l*, as shown in Fig. 5, so that the tongue portion *h* overlaps the base portion *a*, as shown in Fig. 3, and two of these blanks bent to form are placed with their bent portions adjacent to each other, and a wire loop *m*, having parallel sides *n*, is caught over the bent portions *l* of the two blanks, forming thereby a pivotal connection or hinge-joint, which allows either blank to move freely in either direction, and at the same time the bend at *l* is made the extensions *b* and *c* are turned at a right angle with the plate toward the tongue *h*, as are also the extensions *i* and *j* turned toward the base portion *a*. The blanks being thus arranged and hinged together, the abutting ends of the tape *o* are passed between the portions *h* and *a*, with the portions *i* and *j* on the lateral edges thereof. The portions *h* are then closed upon the tape, firmly impinging the serrated edges thereof into the web, and the extensions *b* and *c* and *i* and *j* are then closed over the lateral edges of the tape, and the serrated edges on the same are also firmly pressed into the web, which rigidly and firmly secures the same in position and prevents any liability of fraying out or unraveling of the ends of the web.

It will be readily seen that this arrangement forms a strong and reliable fastening for the abutting ends of the tapes, which allows the tapes to pass over the pulleys with precision and regularity without liability of wearing and tearing, as the flexibility of the hinge-joint allows the fastening to bend in either direction to accommodate the periphery of the pulleys, and the parts being short and closely connected the operation is the same or sub-



stantially the same as with a continuous web, and should it be necessary to remove the tape for any purpose a thin-bladed instrument can be inserted between the sheet-metal parts, and the overlapping portions being easily raised allows the tape to be withdrawn and a new tape inserted and the parts again placed in position.

Of course it will be understood that the construction herein shown need not be strictly adhered to in the practical use of the device in many places, as the form of the overlapping parts and the serrated edges can be changed to suit the convenience of the manufacturer and the operator, and therefore we do not confine our invention to the precise form of the lateral extension and serrated edges; but

What we claim as our invention, and desire to secure by Letters Patent, is—

1. A sheet-metal blank for tape-fasteners, consisting of a body portion *a*, having the lateral extensions *b* and *c*, provided with serrated edges, and the extended portion *f*, provided with serrations *g*, and having the tongue *h*, with its outer edge provided with the serrations *k*, and having the portions *i* and *j*, ex-

tending laterally from its outer portion and provided with serrations, substantially as set forth.

2. A printing-press tape-fastener consisting of two clasps adapted to be attached to the abutting ends of the tape and each clasp composed of the body portion *a*, provided on its lateral edges with extensions *b* and *c*, bent over the lateral edges of the tape, and provided with a tongue portion *h*, bent to overlap the body portion, and provided on its end edge with teeth or serrations *k* for impinging on the tape, and having on the lateral edges of its outer portion the extensions *i* and *j*, bent over and impinging on the lateral edges of the tape, and a wire loop *m*, passed through the adjacent bent portions of the clasps for pivotally connecting the clasps together, substantially as set forth.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

WILBER N. BAILEY.  
CHARLES F. TILTON.

Witnesses:

GEO. P. THOMAS,  
JAS. E. THOMAS.